What is claimed is:

    1.   A data storage medium comprising:

main data including audio data and/or video data;

sub data recorded in a separate bitstream from the main data and reproduced in synchronization with the main data; and

navigation information defining a relation required for the main data and the sub data to be output in synchronization with each other.

    2.   The data storage medium of claim 1, further comprising extra data recorded in a separate bitstream from the main data and the sub data and reproduced in connection with the main data,

wherein the navigation information further defines a relation required for the main data and the extra data to be output in connection with each other.

    3.   The data storage medium of claim 2, wherein the main data are received and encoded by an internal encoder or are input through a digital interface and recorded.

    4.   The data storage medium of claim 2, wherein the sub data and/or the extra data are received and encoded by an internal encoder or are input through the digital interface and recorded.

    5.   A recording method comprising:

(a) recording main data including audio data and/or video data;

(b) recording sub data to be reproduced in synchronization with the main data in a separate bitstream from the main data; and

(c) recording navigation information defining a relation required for the main data and the sub data to be reproduced in synchronization with each other.

    6.   The recording method of claim 5, further comprising:

(d) recording extra data to be reproduced in connection with the main data in a separate bitstream from the main data and the sub data; and

(e) recording navigation information defining a relation required for the main data and the extra data to be output in connection with each other.

7. The recording method of claim 5, wherein step (a) comprises:

(a1) receiving the main data through a digital interface; and

(a2) recording the received main data.

8. The recording method of claim 5, wherein step (a) comprises:

(a1) receiving the main data as analog signal,

(a2) encoding the received main data; and

(a3) recording the encoded main data.

9. The recording method of claim 5, wherein step (b) comprises:

(b1) receiving the sub data through the digital interface; and

(b2) recording the received sub data.

10. The recording method of claim 5, wherein step (b) comprises:

(b1) receiving the sub data as analog signal,

(b2) encoding the received sub data; and

(b3) recording the encoded sub data.

11. The recording method of claim 6, wherein step (c) comprises:

(c1) receiving the extra data through the digital interface; and

(c2) recording the received extra data.

12. The recording method of claim 6, wherein step (c) comprises:

(c1) receiving the extra data as analog signal,

(c2) encoding the received extra data; and

(c3) recording the encoded extra data.

13. A reproducing method comprising:

(a) reading main data including audio data and/or video data;

(b) reading sub data recorded in a separate bitstream from the main data, which is later reproduced in synchronization with the main data; and

(c) multiplexing the read main data and the read sub data.

14.   The reproducing method of claim 13, further comprising (d1) outputting the multiplexed main data and sub data through a digital interface.

15.   The reproducing method of claim 13, further comprising (d2) decoding the multiplexed main data and sub data.

16.   The reproducing method of claim 13, wherein step (c) comprises:

(c1) reading navigation information defining a relation required for the read main data and sub data to be reproduced in synchronization with each other; and

(c2) multiplexing the read main data and the read sub data based upon the navigation information.

17.   A reproducing method comprising:

(a) reading main data including audio data and/or video data;

(b) reading sub data recorded in a separate bitstream from the main data, which is later reproduced in synchronization with the main data;

(c) reading extra data recorded in a separate bitstream from the main data and the sub data, which is later reproduced in connection with the main data; and

(d) multiplexing the read main data, the read sub data, and the read extra data.

18.   The reproducing method of claim 17, further comprising (e1) outputting the multiplexed main data, sub data, and extra data through a digital interface.

19.   The reproducing method of claim 17, further comprising (e2) decoding the multiplexed main data, sub data, and extra data.

20.   The reproducing method of claim 17, wherein step (d) comprises:

(d1) reading navigation information defining a relation required for the read main data and sub data to be reproduced in synchronization with each other and for the read main data and extra data to be reproduced in connection with each other; and

(d2) multiplexing the read main data, the read sub data, and the read extra data based upon the navigation information.